

09/806651

JC08 Rec'd PCT/PTO 02 APR 2001

**Amendment under PCT article 34 (1st time)**

\*substitute pages 4-7  
\*claims after amendment

information of a predetermined channel and time frame is displayed, characterized in that

in accordance with a zoom command instructing a continuous amount of zoom magnification, EPG information of channels or time frames larger or smaller in number than channels or time frames displayed immediately before the zoom command is provided is displayed, and

detail information included in said EPG in accordance with said magnification of the zoom command is selectively displayed.

A second aspect of the present invention (corresponding to claim 7) is an EPG information display method according to the first aspect of the present invention wherein for EPG information of each program displayed on the screen, an amount of EPG information to be displayed is changed according to a display area thereof.

A third aspect of the present invention (corresponding to claim 12) is an EPG information display method according to the first aspect of the present invention wherein in a case where an EPG operation function mode is a search mode, when an area in which EPG information of a program is displayed is selected and specified, the areas of programs associated with the program are shown in a different color or brightness.

A fourth aspect of the present invention (corresponding to claim 15) is an EPG information display method according to the first aspect of the present invention wherein when an

EPG operation function mode is a search mode, the EPG information is displayed in a manner such that, of search results, only the programs fulfilling the search criterion are displayed so as to be close to one another in a direction of a time axis and/or a channel axis.

A fifth aspect of the present invention (corresponding to claim 16) is an EPG information display method according to the first aspect of the present invention wherein a function to operate in conjunction with a recorder is provided, and in an area in which EPG information of a program of which recording is associated with the recorder is displayed, recording condition information for the recorder is displayed so as to be superimposed on the EPG information.

A sixth aspect of the present invention (corresponding to claim 19) is a recorder/reproducer for recording and reproducing a program corresponding to EPG information displayed by an EPG information display method in which all or some of EPG information of a predetermined channel and time frame is displayed,

in accordance with a zoom command instructing a continuous amount of zoom magnification, EPG information of channels or time frames larger or smaller in number than channels or time frames displayed immediately before the zoom command is provided is displayed, and

detail information included in said EPG in accordance

with said magnification of the zoom command is selectively displayed, characterized in that

by selecting an area in which said EPG information of a program that has already been recorded is displayed, reproduction of the program corresponding to said selected area is started.

A seventh aspect of the present invention (corresponding to claim 20) is a recorder/reproducer for recording and reproducing a program corresponding EPG information displayed by an EPG information display method in which all or some of EPG information of a predetermined channel and time frame is displayed,

in accordance with a zoom command instructing a continuous amount of zoom magnification, EPG information of channels or time frames larger or smaller in number than channels or time frames displayed immediately before the zoom command is provided is displayed, and

detail information included in said EPG in accordance with said magnification of the zoom command is selectively displayed, characterized in that

by selecting an area in which EPG information in future from the current time is displayed, timer recording of the

An eighth aspect of the present invention (corresponding to claim 23) is an EPG information display apparatus comprising:

display means where all or some of EPG information of a channel and a time frame predetermined is displayed;

display means where in accordance with a zoom command instructing a continuous amount of zoom magnification, EPG information of channels or time frames larger or smaller in number than channels or time frames displayed immediately before the zoom command is provided is displayed;

EPG information extracting means of selectively displaying detail information included in said EPG in accordance with said magnification of the zoom command; and

means of displaying a picture in a program on the air at the current time in an area of said EPG information displayed by said display means.

#### Brief Description of the Drawings

FIG. 1 is a system configuration view in first to third embodiments of the present invention.

FIG. 2 is a system configuration view in the first to the third embodiments of the present invention.

FIG. 3 is a view showing the format of EPG information stored by EPG data cell storage means in the first to the third embodiments of the present invention.

FIG. 4 is a view showing a remote control unit and key codes in the first to the third embodiments of the present

## CLAIMS

1. (Amended) An EPG information display method wherein all or some of EPG information of a predetermined channel and time frame is displayed, characterized in that in accordance with a zoom command instructing a continuous amount of zoom magnification, EPG information of channels or time frames larger or smaller in number than channels or time frames displayed immediately before the zoom command is provided is displayed, and

detail information included in said EPG in accordance with said magnification of the zoom command is selectively displayed.

2. (Amended) An EPG information display method according to claim 1, wherein said predetermined channel and time frame are in a scope where

a decision is made with reference to a channel and a time of a program to be on the air being set in display means in order to display said EPG information, and said zoom magnification.

3. (Cancelled)

4. (Cancelled)

5. (Cancelled)

6. (Cancelled)

7. An EPG information display method according to claim 1, wherein for EPG information of each program displayed on

the screen, an amount of EPG information to be displayed is changed according to a display area thereof.

8. An EPG information display method according to claim 1, wherein items of said EPG information displayed in each area in which said EPG information is to be displayed are decided based on a size of said area, the number of pixels when said area is displayed or the number of letters that can be shown in said area.

9. An EPG information display method according to claim 1, wherein priorities are previously assigned to items representing contents of said EPG information, and said items are displayed in the order of priority.

10. An EPG information display method according to claim 1, wherein said zoom command stepwisely changes a size from the channel and the time frame displayed immediately before the zoom command is provided to a channel and a time frame displayed after the zoom command is provided.

11. An EPG information display method according to claim 1, wherein said zoom command zooms in or out the screen with respect to EPG information of the displayed EPG information situated in the center.

12. An EPG information display method according to claim 1, wherein in a case where an EPG operation function mode is a search mode, when an area in which EPG information of a program is displayed is selected and specified, said areas

of programs associated with said program are shown in a different color or brightness.

13. An EPG information display method according to claim 12, wherein under a condition where the EPG operation function mode is the search mode, a cursor for selecting and specifying an area corresponding to a search result selectively moves among parts of said areas in which EPG information is displayed which areas are shown in the different color.

14. (Cancelled)

15. An EPG information display method according to claim 1, wherein when an EPG operation function mode is a search mode, said EPG information is displayed in a manner such that, of search results, only said programs fulfilling said search criterion are displayed so as to be close to one another in a direction of a time axis and/or a channel axis.

16. An EPG information display method according to claim 1, wherein a function to operate in conjunction with a recorder is provided, and in an area in which EPG information of a program of which recording is associated with said recorder is displayed, recording condition information for said recorder is displayed so as to be superimposed on said EPG information.

17. (Cancelled)

18. An EPG information display method according to



claim 16, wherein said condition information for said recorder is information representing a type of said recorder, that recording is underway, that recording is finished and that programming of timer recording is finished.

19. (Amended) A recorder/reproducer for recording and reproducing a program corresponding to EPG information displayed by an EPG information display method in which all or some of EPG information of a predetermined channel and time frame is displayed,

in accordance with a zoom command instructing a continuous amount of zoom magnification, EPG information of channels or time frames larger or smaller in number than channels or time frames displayed immediately before the zoom command is provided is displayed, and

detail information included in said EPG in accordance with said magnification of the zoom command is selectively displayed, characterized in that

by selecting an area in which said EPG information of a program that has already been recorded is displayed, reproduction of the program corresponding to said selected area is started.

20. (Amended) A recorder/reproducer for recording and reproducing a program corresponding EPG information displayed by an EPG information display method in which all or some of EPG information of a predetermined channel and time frame is

displayed,

in accordance with a zoom command instructing a continuous amount of zoom magnification, EPG information of channels or time frames larger or smaller in number than channels or time frames displayed immediately before the zoom command is provided is displayed, and

detail information included in said EPG in accordance with said magnification of the zoom command is selectively displayed, characterized in that

by selecting an area in which EPG information in future from the current time is displayed, timer recording of the program corresponding to said selected area is programmed.

21. A recorder/reproducer according to claim 19 or 20, wherein as a method of controlling a recorder corresponding to the EPG information, a serial bus interface defined by IEEE1394-1995 is used.

22. A recorder/reproducer according to claim 19 or 20, wherein as a method of transmitting video data, sound data or additional data of a program corresponding to the EPG information from a recorder that records or reproduces said program, a serial bus interface defined by IEEE1394-1995 is used.

23. (Amended) An EPG information display apparatus comprising:

display means where all or some of EPG information of

a channel and a time frame predetermined is displayed;

display means where in accordance with a zoom command instructing a continuous amount of zoom magnification, EPG information of channels or time frames larger or smaller in number than channels or time frames displayed immediately before the zoom command is provided is displayed;

EPG information extracting means of selectively displaying detail information included in said EPG in accordance with said magnification of the zoom command; and

means of displaying a picture in a program on the air at the current time in an area of said EPG information displayed by said display means.

24. (Amended) A recording medium being able to be read by a computer that stores a program to cause a computer to perform all or some of functions of said EPG information display method, said EPG information display apparatus and said recorder/reproducer according to claim 1, 2, 7, 8, 9, 10, 11, 12, 13, 15, 16, 18, 19, 20, 21, 22 or 23.